

*Eng. Hist. Topog. vol. 1*

REPORT  
FROM THE  
COMMITTEE  
OF THE

Honourable the HOUSE of COMMONS

Appointed to enquire into

THE Progress made towards the Amendment  
and Improvement of the Navigation of the  
THAMES and ISIS, in consequence of  
the several Acts passed for that Purpose;

AND ALSO INTO

The AMOUNT of the RECEIPTS and EXPENDITURE

AND OF THE

STATE of the TRADE on the said RIVERS

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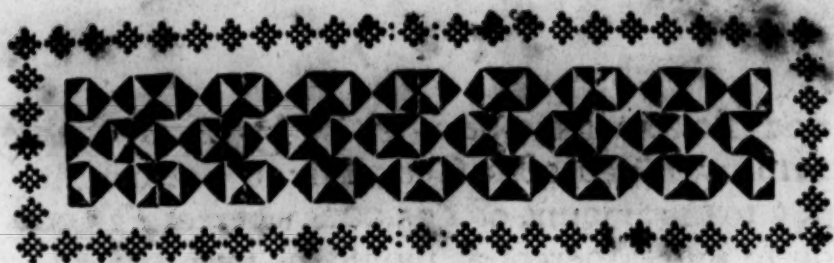
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UNIVERSITY OF CAMBRIDGE





## R E P O R T, &c.

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The COMMITTEE who were appointed to enquire into the Progress that has been made towards the Amendment and Improvement of the Navigation of the THAMES and ISIS, in consequence of the several Acts passed for that purpose; and also into the Amount of the Receipts and Expenditure, and of the state of the Trade on the said Rivers; and to Report the same, as it shall appear to them, to the House;

**H**A V E, pursuant to the Orders of the House, enquired accordingly; and find, that several Acts have been passed for the improving the Navigation of the Thames and Isis, from the 3d of James the First to the 24th of George the second, but no Power was given in either of those Acts to borrow any Sum of Money for such Improvements; since that Pe-

riod Powers have been given by Acts of the 11th, 15th and 28th Geo. III. to borrow Money to the amount of £75,000; whereof £25,000 or so much thereof as should be found necessary, was to be laid out in improving and completing the Sixth District of the said Navigation.

By Act 11 Geo. III. the Navigation was directed to be divided into Six Districts, viz, the First, extending from the City of London to the City Stone above Staines Bridge; the Second, from the City Stone to Boulter's Lock, above Maidenhead Bridge; the Third, from Boulter's Lock to Mapledurham, above the Entrance of the Kennet; the Fourth, from Mapledurham to Shillingford, in the County of Oxford; the Fifth, from Shillingford to Oxford; and the Sixth from Oxford to Cricklade, in the County of Wilts.

By the same Act, all Members of the House of Commons resident within or representing the Counties of Wilts, Gloucester, Oxford, Berks, Bucks, Surrey and Middlesex; the Lord Mayor and Aldermen of the City of London; the High Bailiff of Westminster; the Vice Chancellor and Heads of Colleges and Halls in the University of Oxford; the Dean and Canons of Christ Church; the Dean and Prebends of Westminster; the Dean and Residentiaries of St. Paul's; the Dean and Canons of Windsor: the Provost and Fellows of Eaton College; the Rectors and Incumbents of

the several Parishes that border on the Thames; the Mayors and Recorders of Oxford, Abingdon, Wallingford, Reading, Henley, Maidenhead, and Windsor; the Bailiffs and Recorder Kingston upon Thames; the Trustees or Commissioners of the River Wey, the Proprietors of the said River; the Mayor, Aldermen, and Recorder of Guilford: and the Bailiffs of the town of Godalming for the Time being, and all Persons who should at any Time reside or have an Estate of One hundred Pounds per Annum within either the Counties before named, were appointed Commissioners for putting the said Act into Execution, and have been continued by the subsequent Acts; but now execute their Powers within the Five upper Districts only, viz, from Staines to Cricklade, the First District being by the Act 14 Geo. III. placed under the Jurisdiction of the City of London. Then,

Mr. WILLIAM MONTAGUE, from the Chamberlain's Office of the City of London, delivered in to your Committee an Account of Money received and paid annually, for carrying on the Works on the River Thames, within the Jurisdiction of the City of London from the 29th of September 1785 to the 29th of September 1792, by which it appears, that the produce of the Tolls paid into the Chamber, as taken on an Average of Five Years, ending Michaelmas 1792, amounted to £1,988 16s. 11<sup>3</sup>/<sub>4</sub>d. and the Disbursements to £2,291 7s. 8d. making an Annual Deficiency 0



£ 303. os. 8 $\frac{1}{4}$ d.; and also a State of the Debts contracted in carrying on the works for improving the Navigation, amounting to £ 14,995. 10s. 11d. and an Account of Money expended by the Corporation out of their own Estate in the years 1774, 1775, and 1776, towards improving the said Navigation, exclusive of £ 76. 13s. 4d. per annum to the Clerks who attend and do the business for the Committee; and also,

A State of the Money received and paid for seven years commencing the 29th of September 1785, and ending 29th of September 1792; by which the Total Receipts appear to have been £ 15,204. 12s. 7d. and the Disbursements £ 15,031. 19s. 8 $\frac{1}{2}$ d. leaving a Balance in hand of £ 172. 12s. 10 $\frac{1}{2}$ d. And also,

A List of the Seventeen surviving Annuity-tants, from the age of 64 to 81 who receive £ 478 per annum for the Principal Sums of £ 5,300 borrowed of them; Then,

Mr. CHARLES TRUSS, Clerk of the Works within the Jurisdiction of the City delivered in an Account of the Number of Tons of Goods sent from Leachlade, Oxford, Abingdon, Wallingford, Newbury, Reading, Henley, and Wooburn, from September 29th 1789 to September 29th 1790, amounting to 64,358 Tons; and also,

An account of number of Tons of Goods sent from 29th of September 1791 to 29th of September 1792, from Maidenhead, Windsor, Staines Chertley, Guilford, Weybridge, Shepperton, Mouldsey, Ditton, Kingston, Twickenham, Richmond, Isleworth, Brentford, and Stroud, amounting to 201,175 Tons, and distinguishing the Toll received by the City, and the amount of Goods sent from each Place; Then,

Mr Truſs being examined, ſaid, he believes that the ſtate of the Navigation from Staines to Iſleworth is as good as it poſſibly can be under the preſent Tolls, but that in dry ſummers there is no more than two feet ſix inches of Water for ſix months together; that he knows of no other method by which the River could be effectually improved, ſo as to give Three Feet Ten Inches of Water at all Times, but by making of Pound Locks, which (as there is 36 Feet Fall) he apprehends would require Nine Locks from Staines to Richmond; but a Canal Navigation would be preferable to the River with ſuch Pound Locks.

And being asked, if he knew the ſtate of the River from Staines to Boulter's Lock? he ſaid, he did; and that that part of the River is liable to much the ſame Obſtructions as in the other Diſtrict; that it might be improved by Pound Locks, but not effectually; and he has no doubt but it would be preferable to cut a Canal from Boulter's Lock to Iſleworth;

that there Annually passes between Boulter's Lock and Isleworth about 107,265 Tons up and down, about two Thirds as much up as down; that about Three Years ago, in One Year, 64,539 Tons came down past the lock, and 42,906 Tons went up, ascertained by the Tolls collected for the City, which calculation does not include Goods belonging to any place below Boulter's lock; that the City collect Four Pence per ton for all Goods that pass Staines; that it will require, he apprehends, seven Pound Locks between Staines and Boulter's Lock; that he knows the Clewer Stream, but believes that if the Navigation was carried down the mill Stream, it would be a great Hindrance to the Barges Navigating, as there is no material Shoal in that part of the River; that before the improvements were made within the City's Jurisdiction, he has known Barges Twelve or Fourteen days coming down, but since that time they are about a day; that if a Canal was made from Isleworth to Boulter's Lock, at two miles and an half an Hour, it would take up Eight Hours.—And being asked if he had made any Calculation what the saving of Freight would be if such Canal was made? he said, at the rate of an Halfpenny per ton per Mile, there would be saved of expences, in a Barge of 140 or 150 Tons, about £8. per Voyage; and that he should suppose if the Canal was made 60 feet wide, two Horses would be sufficient to tow such a Barge, but if only 30 or 40 feet it would be a greater Draught, and require more; and that from



twelve to sixteen Horses are required upon the River; that great expence is incurred by the Hawling Lines on the River, One of £13. Value being worn out in about Three Voyages; they would not want one of half that Expence on the Canal, which would last three months perhaps; and that he has been acquainted with this business almost Fifty Years.

And being asked, whether there are any Tolls collected by Individuals within the Jurisdiction of the City that remain unpurchased? he said, there are six, viz. One at the Earl of Dysart's at Petersham, who receives three pence per Horse towing, this amounts to £190. a year, which, since he remembers, paid only £8, and that not paid by the Barge Masters, but by the Proprietors of the Towing Horses; the next is at Kingston, belonging to Messrs. Burchett and Company, at threepence per Horse, which amounts to about the same sum; the Towing path is now there which was formerly on the Middlesex side; the next is Colonel Hodges's at Moulsey, only £5. a Year by agreement; the next is Mr. Perrott's of Laleham, at one penny per horse, which produces about £35 a year; the next is Lord Lonsdale's at Laleham, at Two Pence per Horse, which amounts to about £70. per Annum; the next is at Staines Bridge, for going under the bridge at Eight Pence per Barge which amounts to about £35 a Year; and he imagines about £15,000 would purchase these Private Tolls.—and being asked, if any Works within the Ci-

ty's Jurisdiction are suspended for Want of Money to defray the Expences? he said, several very necessary Works, namely, a Towing-path is much wanted at Staines; a Bridge over a Creek at Wharton; and a Towing-path at Richmond, of about 300 feet in length in deep Water.

And being asked, What a Half-penny per Ton per Mile on the Tonnage likely to pass upon such a Canal would produce? he said, on the present Trade about £4,500 per Annum; but he apprehends the Canal would induce more trade to pass than at present does on the River, and that with two horses, a towing Line of the Value of £2 will be sufficient.

That the Distance from Isleworth to Boulter's Lock by the River is Thirty-seven miles and an half, the proposed Canal will be only Nineteen miles and an half; that the expence of Towing on the River is about £12. but by the Canal will be £1. and that it will take a barge three days, or in summer Time, with a favourable Water, Two Days to go from Isleworth to Boulter's lock; but barges are frequently detained in summer Time for want of Water Five or Six days, and he has known them a fortnight; that Flashing is much used on the River, which is a very abominable Practice, because after the Flash is drawn, and the lock shut in again, it leaves the River almost dry for Twenty-four hours, insomuch that he has walked over the Channel of the River at Marlow,

without wetting his Feet ; and Barges navigating upwards are stopped for many hours ; and the Mills are also stopped in consequence ; that the Distance from Isleworth to Windsor is about  $29\frac{1}{2}$  Miles along the River, that supposing the Canal to take Place it would be only 15 Miles ; that the present Freight of Coals from London to Windsor is Nine Shillings per chaldron, but he apprehends it would not be more than five shillings if the Canal should be made ; that the present freight of Goods between London and Reading is Ten shillings per ton, but he supposes by the Canal they would be carried for six shillings and eight pence per ton either up or down ; that Goods would be delivered in Two Days by the Canal between London and Reading, while the passage by the Thames is uncertain ; that the Price of land Carriage of Goods between London and Reading is thirty-three shillings and four pence per ton, or twenty Pence per hundred ; that he thinks Goods might be delivered in much the same time by the Canal as by Land Carriage ; that the old Thames Barges make Eight or Nine Trips a Year between Reading and London, but if they had sufficient freight on the Canal, they might make a trip a week ; but he apprehends that the Barges to be used on the Canal would be smaller, and therefore require much the same Number are now used ; that they should not exceed One hundred tons burthen, which would require two Horses, he should think



to tow them; that the distance from Boulter's Lock to Windsor is about 7 miles, and from Boulter's Lock to Marlow is near 8 miles; that the Freight of Coals from London to Marlow is eight shillings per Chaldron; the difference between the Freight to Windsor and to Marlow is occasioned by the Marlow Barges having downward Freight, and the Windsor Barges scarcely any.—And being asked, how many Voyages might the Thames barges make if they had Freight sufficient? he said, they might make 14 or 15 if there was no obstruction by Floods or low Water; and he has heard when they were smaller than they now are, they have made as many; but a Year is hardly ever known but what there are such Obstructions. Then,

Mr HENRY ALLNUTT, General Clerk to the Commissioners acting for the Five upper Districts, delivered in to your Committee an Account of the Tolls now paid in the five upper Districts for a barge of 60 Tons to the old Lock and Weir Owners, as well as to the Commissioners, amounting in the whole to 7s. 4d. per ton between Staines and Leach-lade; And also,

An Account of the Receipts and Payments on the Thames Navigation for 8 years, from 1785 to 1792, by which it appears the Receipts have been £60,627. 1s. 2d. and the Payments £62,926. 7s. 10d.; And also,

Accounts of the Trade that passed on the River from Marlow, Henley, Reading, Wallingford, Abingdon, and Leachlade, amounting in

|      |   |    |   |              |
|------|---|----|---|--------------|
| 1767 | - | to | - | 56,365 tons. |
| 1781 | - | to | - | 59,796 tons. |
| 1786 | - | to | - | 55,503 tons. |
| 1787 | - | to | - | 67,011 tons. |
| 1788 | - | to | - | 59,238 tons. |
| 1789 | - | to | - | 70,191 tons. |
| 1790 | - | to | - | 60,528 tons. |
| 1791 | - | to | - | 60,328 tons. |
| 1792 | - | to | - | 68,800 tons. |

And also, A list of the Offices and Officers of the Navigation, with an Account of their Salaries, amounting to £826. 17s. per annum, exclusive of the District Clerks, who are paid according to their trouble, not having a settled Salary; the Receivers of the Tolls, who have two Pence in the Pound of the Money received; and of the Treasurer who receives no Emolument; And also,

Copies of Proceedings, Orders, and Resolutions of the Commissioners of the Navigation relative to the Second District, since the 27th of June 1793; And also,

Copies of Orders, Proceedings, and Resolutions of the Commissioners, relative to the Appointment of Committees for building Lech-

lade and Osney Pounds, and rescinding such Resolutions; And also,

Copies of Proceedings, Orders, and Resolutions of Commissioners relative to the sixth District, made since 27th July 1791; And also,

Copy of a Brief of a Bill intended to have been brought into Parliament in 1793, for enlarging the Powers of the Acts made for improving and completing the Navigation of the Rivers Thames and Isis, from the City Stone near Staines in Middlesex to Cricklade in Wilts; And also,

Copy of Extracts of Proceedings of the Commissioners of the Thames Navigation, as to the intended Canal from Boulter's Lock to Isleworth; Then,

Mr. Allnutt being examined, said, That the Commissioners have borrowed on the Credit of the Five upper Districts £48,900, of which £47,400 has been received, which together with the Tolls have been laid out in purchasing Land for, and erecting Twenty-two Pound Locks, purchasing Two more of the Commissioners of Sewers, making a continued Horse towing path from Staines to near Oxford, being about 64 miles, and 15 miles of other Towing paths in various disjunct parts, with Gates, Bridges, and other Works necessary for such Towing path; and in payment of



the Interest , Salaries to Officers , Rents of Towing paths, and rebuilding and Repairs of Works.

The Tolls , paid throughout to the old Lock Owners, being private Individuals, and existing before the 11 Geo. III. and which were secured by that Act without Power of Reduction, amount on 1 ton to 3s. 3d., as appears by Orders of the former Commissioners, lodged in the Hands of the Clerks of the Peace of the Counties through which the Thames passes, the Tolls which the Commissioners, acting under the Acts 11, 15, and 28 Geo. III are empowered to lay, is Four Pence per Ton at each Pound Lock ; and the Tolls actually laid and taken by them amount throughout to 4s. 1d. per ton, the whole Toll, as well public as private, taken from Staines to Leachlade, being the highest point to which improvements extend (a Distance of about 105 miles) amount to about  $\frac{1}{2}$ d. per ton per mile, or 1d. for each Fare, Trip, or Voyage to London and back . The amount of the new Tolls from Staines to Reading, on the Average, is  $\frac{1}{4}$ d. per ton per mile ; from Reading to Oxford,  $\frac{3}{4}$ d. per ton per mile ; from Oxford to Leachlade,  $\frac{1}{2}$ d. per ton per mile ; the whole Toll from Staines to Reading is collected between Maidenhead and Reading, being about 24 Miles. There is no Lock between Maidenhead and Staines, and consequently no toll, though a considerable Sum has been expended on that part of the Navigation. In 1767 there passed

56,365 tons through Marlow Lock upwards; and as that is not the lowest place where Tolls are now taken by the Commissioners, it is conceived that 5,500 more tons may be added to it, making 61,865 tons that passed Boulter's lock before the Improvements were made under Act 11 Geo. III. and since that there has passed Boulter's lock upwards, on an Average of Seven Years, from 1785 to 1792, inclusive, 69,285 tons, being an increase of 7,420 tons per Annum. this Calculation is taken from what each Boat is marked for, and not from the Goods actually on Board. the Boats are marked to pay for 3ft. 9in., and are allowed to draw 1 inch more Water; for which they do not pay. There are also supposed to be near 20,000 ton of Goods brought upwards, within the Commissioners Jurisdiction, between Staines and Boulter's Lock, for which no Toll is paid to the Commissioners. The above Quantities of 69,285 and 20,000, making together near 90,000 tons, is the whole of the Trade passing upwards from Staines; and the Trade passing downwards, is presumed to be fully equal to the upward Trade; which makes the whole Trade passing on the Navigation at Staines 180,000 Tons per Annum.

That from the best Information he could obtain, the Price of the Carriage of Goods, including Freight and Tonnage upwards, in 1772, was, to Windsor 8s. per Chaldron of Coals, and now is 8s., and at the Rate of  $1\frac{3}{4}$ d. per ton per mile; — to Maidenhead was 9s.,

and now is 8s. and at the Rate of  $1\frac{1}{2}$ d. per ton per mile;—to Great Marlow, 10s. and now is 8s.;—to Henley was 12s. and now is 9s., and at the Rate of  $1\frac{1}{4}$ d. per ton per mile;—to Reading was 15s. and now is 9s. 6d. and at the Rate 1d. per ton per mile, higher than which place the Commissioners have not set the price of Carriage since the Improvements were made: that when the last Loan was made in 1791, to raise £10,000, Offers were made to subscribe £19,000 the Bonds have frequently borne a premium of £5. per centum.

That it appears by the Accounts that the Oxford Committee had received, up to the time of passing

|                              |   |   |           |   |   |
|------------------------------|---|---|-----------|---|---|
| their Account, in 1791       | - | - | £4,438    | 7 | 3 |
| and since that time          | - | - | 800       | - | - |
| that the Leachlade Committee | } |   | 8,500 - - |   |   |
| have received                |   |   |           |   |   |

making, 13,738 7 3

the whole Money applied in the 6th District £13,738 7s. 3d. out of £25,000 allowed by the Act 28th Geo. III. for that district, which sum arises from both Loans and Tolls, the Gross Toll in that District amounting to £354. 1s. 6d; the Net to £279. 14s. 6d. per Annum: that of the Sum allotted to the Oxford Committee, £10. has been paid Mr Clowes for surveying and £195. 6s. to Daniel Harris for superintending in the Years 1788, 1789, 1790, and 1791: that the Sum which had been laid out in that



District, prior to the Act 28 Geo. III. was £231. for altering Radcot Bridge, in the Year 1787.

That the Plans which have been taken by the Orders of the Commissioners of the River, were, 1st. one taken by Mr Nicholls (he believes about the time of the Commencement of Act 11 Geo. III.) which went from London Bridge to Leachlade; another from Leachlade to Reading was taken by Mr. King, about the year 1787; and another by Mr. Mylne, which is annexed to his Report, in 1791: that he conceives the Plans taken by Mr. Nicholls and Mr. King were not from actual Admeasurements, as they do not note the Fall of Water or the Shallows between Leachlade and London Bridge, or other impediments to the Navigation; the Fall of Water is accurately described in Mr. Briendley's Map as high as Boulter's Lock, but that Map was not done by Order of the Commissioners: that he apprehends no general Survey has been made of the River from Leachlade to Boulter's Lock, or further down the River, but only partial or local ones, of small distances, and at different times, and by different Persons.—And being asked, if there are any experienced professional Engineers in the employ of the Commissioners, acquainted with the proper mode of improving River Navigations? he said, the only Persons employed by the Commissioners, as Surveyors, in amending and improving the Navigation, are Mr. John Treacher for the Fourth, Fifth,

and Sixth Districts, and Mr. John Clark for the Second and Third Districts, who have been in that employ many Years past.

That he finds 12 Voyages have been made by one Milles from Reading to London in 1781, and he thinks there have been frequent Cases of 14 Voyages being made from Reading in the Year—that the first Locks on the River were built with deal; they have been all rebuilt, with Oak or Brick except two, Caversham and Mapledurham, which are now in a very bad State; that Application was intended to be made in this Session of Parliament, and the Notices given as required by the Standing Orders, for an Act of Parliament for erecting Pound Locks below Boulter's Lock, and for other purposes, the proceedings on which intended Act were postponed by Order of a General Meeting of the Commissioners.

Mr. JOHN CLARK, Surveyor of the 2d. and 3d. Districts, being examined, said, that he has been Surveyor 19 years last August; the Nature of his employ being to keep the Works in Repair, and to report, from time to time, the Works necessary to be done: that the Navigation in the Third District is very good; in the second District very bad, for want of Pound Locks and Stops, between Boulter's Lock and Staines: that He thinks the Navigation in the Second District can be made equally convenient for Navigation as in

the Third, By erecting Three Pound Locks ; the First near Clewer Mill , and making the passage for the Barges through Clewer Mill Stream ; the second, near the King's Engine, below Windsor Bridge ; the third, he has not yet determined where it should be ; but he thinks, near the City Stone : that the difference in level from Clewer mill Lock to the lock proposed near the King's Engine, is near five feet ; the difference between Clewer Lock and Windsor Bridge , is two feet ; but between Windsor Bridge and the point of the Island called black Potts, near the Engine, it is three feet, though the distance is not above  $\frac{3}{4}$  of a mile : that he conceives there is no other Way of improving the Navigation of this district, so as to allow Boats, drawing 3ft. 10in. of Water, to pass ; but there is a difference of Opinion with respect to the passage by the Clewer Mill Stream : that Mr Davis has been twice to Survey the second District, by Order of the Commissioners, but thought the Water was too deep ; but that it did not appear to him to be so, particularly the last Time ; that the Barges meet with the greatest Obstruction about  $\frac{1}{2}$  a mile below Windsor Bridge, in the second District, and near Laleham in the First.

Mr. JOHN TREACHER, Surveyor of the Upper Districts, delivered in to your Committee a Report of a Survey made by him to the Commissioners, the 5th of May 1792; And also,



An Estimate, made August the 27th 1791, by Mr. S. Simcock (Engineer of the Oxford Canal) for making and completing the River Ifis, from Fidler's Islands to Godstow lock; then,

Mr. Treacher being examined, said, that he has acted as General Surveyor to the Commissioners for 6 Years last Lady day: that there wants, in the fourth District of the River, a stop to be made below Wallingford Bridge, near Chamber's Hole: that Hart's Lock is a very great Nuisance, owing to the great Quantity of loose Timber; and Wallingford Bridge is another, the Arch wanting to be widened, and the Ribbs taken out, and several Shoals require to be ballasted.

In the fifth District between Days and Sutton Locks there requires a stop or Pound Lock at or near Clifton Ferry; nothing more material is wanting until you come to Newnham, from thence to Oxford there is no Towing path formed; Two Pound Locks (Sandford and Ifley) want lengthening and repairing, the Weirs of both of those Locks want raising, and ballasting is wanted between Newnham and Oxford, and stops to the back Ditches, some of which want Gauge Weirs, and others to be totally stopped; the Pound Lock that has been recommended by Mr. Jelsop at Newnham is found not to be necessary.

In the Sixth District there wants a new navigation Arch to Folly Bridge, and a short cut

above the Bridge to Osney Stream; the Tail Cut to Osney new Pound Lock wants deepening, the Navigation is then good till it comes to the four Streams, and from thence to Godflow the Navigation is very bad; the Towing path has been formed, but most part of it is washed away by the Flood, it should have been on the opposite side; the Sills of Osney Lock are rather too high, but that's because a proper Head is not kept up; Godflow is much in the same Way, but there is a long Cut above the Lock, which is not deep enough in some places by a foot, and in others eighteen inches; these two Locks, and the Works upon Port Meadow, were executed under the direction of Mr Daniel Harris of Oxford; that this part of the River came naturally under his inspection as Surveyor; that he was Ordered by the Commissioners to survey it at several Meetings, and went several Times to inspect into the Works, but the Oxford Committee appeared very angry with him for interfering, having appointed Mr. Harris: that a more eligible line in his Opinion may be found than continuing the Navigation down Port Meadow by coming down the Witham Stream that he thinks the head Sill of Pinkill Lock is rather too high, but it has not had a fair Trial, there not having been a sufficient pen of Water; that the general state of the Navigation between Oxford and Leachlade is much the same as when viewed in 1791 by a Committee of Commissioners; materials are provided in Port Meadow to erect a Weir on the side of it, according to Mr Simcock's Plan and Estimate.

And being asked, whether, if Mr. Clowes the Engineer appointed by the Leachlade Committee, had proceeded, with his Assistant Clerk of the Works upon the Thames, the Navigation would have been compleated by this Time? he said, if there had been no more Pound locks to be built it would; and that he has a constant Salary from the Commissioners for superintending and constructing Works in these Districts; that some of the Materials provided under the direction of Mr. Clowes, he thinks, have perished for want of being used; the stone that lies on the side of Port Meadow must be damaged, the Bricks much damaged, and the lime totally spoiled.

That the Clerk to the Commissioners wrote to the Proprietors of Weirs separately, and he has called on them all to require them to put them into good Repair, which they promised to do as soon as they could; one of them has been rebuilt (Old Nan's weir;) Then,

Mr. JOSIAH CLOWES being examined, said, That he was concerned in constructing the works on the Thames from Leachlade to Rushey; he left that employ in 1790; and if he had continued with the same workmen he should nearly have compleated the works to Oxford by this Time, though he could hardly get the Materials quick enough down the River, on Account of the Shoals; that he does not think it adviseable to conduct the



Navigation down Port Meadow; but if it were so, the towing path ought to have been made on the solid Ground, the deepest Water running close to the solid Ground; he thinks the Navigation ought to have gone down the Witham Stream, but he can't speak with certainty, not having surveyed it himself; that he knows of the Berkeley, Hereford and Gloucester, Leominster, and the Birmingham and Worcester Canals now forming to the Severn, the Goods from which are expected to pass through the Severn Canal down the Thames to London; that he has seen the Plan of a Canal made by Mr. Whitworth, in the year 1784, from the Thames and Severn Canal, above Lechlade, to Abingdon, and thinks it a most eligible one, and that it would have been more for the advantage of the Public to have executed that Plan than to have attended to the Improvement of the River. Then,

Mr. ROBERT WHITWORTH, Engineer, being examined, said, that he recollects making a Plan, in 1784, of a Canal from the Thames and Severn Canal to Abingdon, which was proposed in Consequence of the bad State of the River Navigation; that he took the Soundings, and measured the length, and found it was very shallow, and very bad in many Places, and the Towing path in bad order in some places; he recollects Port Meadow being one of the shallowest places, that it would be much better to make the Towing path there on the

solid Ground, as it must be very expensive to  
 raise it out of the bed of the River; that the  
 Canal would have been compleated by this  
 Time if the Act had passed; and if Water can  
 be obtained for making a Canal from Hart's  
 Ferry to Abingdon, it would be a public Ad-  
 vantage, saving 18 miles out of 24, but he  
 is not certain whether Water could be got  
 high enough from the River Ock, but he sup-  
 poses it might by fetching it a great way, but,  
 by means of a Fire Engine, it may be had ei-  
 ther out of the Ock or Thames; that he took  
 a Survey of the River from Boulter's Lock to  
 Isleworth, and revised part of it in 1774;  
 that it would be very expensive to compleat  
 the Navigation of that part of the River by  
 Pound Locks, as there must be Weirs across  
 the River, or else the Locks would be of little  
 Use; the only way to make a perfect Navigati-  
 on will be to make a Canal from Boulter's lock  
 to Isleworth, there having been a great deal of  
 Money laid out on the River, and it still con-  
 tinuing very imperfect; that it is impossible to  
 say what the Expence of a Pound Lock and  
 Weir below Boulter's Lock would be, unless  
 the Place was pointed out, and a Plan for-  
 med for it, and he never Surveyed the Ri-  
 ver with that View, and thinks, that with  
 Pound Locks and Weirs it never will be made  
 a good Navigation between Boulter's Lock and  
 Staines; that he has Surveyed the River with  
 a View to build a Lock at Chertsey, the Ex-  
 pence of which he supposes will be between  
 two and three thousand Pounds; that he knows

the Mill Stream at Clewer, and that it would be much better for the Navigation to pass through that Stream than down the River; the Lock might be set near the Mill to very great Advantage; that upon his Survey of the River, he saw there was a much better Way of improving the Navigation than by making Pound Locks, that is, by a Canal from Boulter's lock to Isleworth.—And being asked, if the Navigation of the River could be made good as low as Staines, might not a Canal be made from thence to Isleworth? he said he doubted if the Water could be taken out of the River at Staines on a Level sufficiently high to go the Cut which was proposed to go from Boulter's Lock, but perhaps there might be a Line found lower down, and imagines it would be better to come out above Staines; the Fall of Water between Boulter's Lock and Isleworth is about 70 feet.—And being asked, how many Locks will be necessary between those Places? he said, if made by side Cuts out of the River, they must not be above 5 feet, but if made by a Canal, they may be 10 feet each; and he imagines 14 or 15 Locks will be necessary, as a River Navigation requires very near every foot of Water to be penned up, otherwise the Boats will hang upon the Sills in short Water Time; that he thinks Pound Locks may be built so as not to blow up, but they will be liable to Damage every Flood; that the Fall from Staines to Isleworth is about 36 feet; that he had made a Plan of an Inland Navigation from Boulter's Lock to Isleworth, but has not the Estimate



here; but he thinks it was less than £50,000; and if the Canal was to be made, the Town of Windsor would have the same Navigation they have now, and they may have a Collateral Cut to the Canal of about a Mile long; that he has made a Calculation of how much it would lower the Water at Windsor, which he thinks was about the 20th part of an Inch, and was made upon the greatest number of Boats that was supposed would pass on the Canal.--And being asked whether there was to be a Pound Lock on the Collateral Branch? he said, there must be a lock.

Mr. ROBERT MYLNE, Engineer, then delivered in to your Committee Extracts from Reports of the Engineers appointed by the Commissioners to survey the State of the Navigation; and from Report of the Committee of Commissioners, appointed at a General Meeting to Survey the said Rivers, held 31st May 1791; And also,

Extracts from the Report of the Committee of the Thames Navigation Commissioners, on the state of the Navigation below Great Marlow, dated June 24th 1789, with Mr. Brindley's Estimates for making a Navigable Canal from Monkey Island and Boulter's Lock to Isleworth; And also,

Estimate of and Contract with Mr Edge for building Pound Lock near Osney Mill; Then,

Mr. Robert Mylne being examined, said, he has Surveyed the River from Leachlade to Whitchurch; in consequence of that Survey, he made the two Reports, extracts from which he has laid before the Committee, and in which he has stated every Thing material that was defective in the Navigation, and suggested various Particulars to remove the Defects: The State of the Navigation from Folly Bridge downwards is in a tolerable State; but from that point up to Leachlade, it is in his Opinion no Navigation at all, fit for the demands of the Country; and for want of those things being done which he recommended upon making these Reports to the Commissioners, a Committee was appointed to inspect the whole extent of the River from Leachlade to Whitchurch, on which he had reported, and he attended the Survey made by that Committee of several Days continuance; that since that Time he has had different opportunities of inspecting some parts of that Navigation, and he could not find in those Parts that any Thing had been done, except at Pinkill Weir, next above Ensham Bridge, where a Pound Lock has been constructed, but is of no Kind of Use in itself to the Navigation, on Account of the old Weir of Timber in the bed of the River being totally rotten and tumbled into the River, and seemingly deserted; the State of the different Weirs are totally ruinous, and left so by the Proprietors or Occupiers in Expectation of something being done by making Pound Locks and Cuts; and by nothing being

done in that respect he conceives the Navigation to be in a worse State now than formerly; that he has examined the Plan of a Canal made by Mr. Whitworth, in the Year 1784, from the Thames and Severn Canal above Leachlade to Abingdon, and gone over the greatest part of the Ground, that if the improvements of the River were not to be carried to a much greater Degree than they are, the Canal would be the better and most useful Navigation; but if the River was to be improved to the extent it is capable of, he thinks it would be better for the Public that it should be confined to the River, but he considers the Improvements up to the present Time as a Half measure only; that he believes if that part of the Thames through Oxford had not had the Money laid out on it there has been, it would have been much better, and less expensive to have gone by the Witham Stream; but as the point had been determined on to improve the Thames through Oxford, he pointed out in his Report the best Method of performing that Service; and the Navigation through Port Meadow has been continued in a Way diametrically opposite to the Opinion he gave, which was, to have continued the Towing Path on that side of the River where the Land is highest in point of Level, and nearest to the deep navigable Water; but the Question of some Willow Trees, more or less, on one side of the River than the other, seemed to weigh very much in the Scale; and afterwards, having been advised with on that point, he was interrupted in



the Course of his investigating that subject by a Minute being sent him, that there was no occasion for his taking any more trouble on that Head; That he thinks it would be a good Thing for the Country if a Canal was made from Hart's Ferry to or near Abingdon, even though the Navigation of the River was made complete round by Oxford between those Points: That when he said he thought that if the River was improved to the Point to which it is capable, it would be better than the Canal, he alluded to the whole Length from Leachlade, whereas he only now speaks of from Hart's Ferry to Abingdon, leaving the River navigable for the rest of the Way, which would save about 19 miles out of 24; and if both the Propositions were executed, he is induced to believe that the principal Passage Way used by the Public would be by the Canal, even if they were to pay a Duty equal to the Expence of raising all the Water necessary for it out of the Rivers Ock or Thames by Fire Engines. The Reasons for this Opinion are, First, the shortness of the Line; 2dly, the certainty of the Navigation; and 3dly, its never being liable to Inundations; And that if the several Things which he mentioned in his Report, together with the additional Matter which occurred on the Survey made by the Committee, had been adopted, the River Thames and Isis would have been a complete line of Navigation so far as the extent goes: That the Existence of the old Locks under a separate Management, and the Collection of Tolls there, independant

of the Commissioners, is a considerable Obstacle to the Improvement of the Navigation; and so is also Weirs and Fisheries.

And being asked, If he thinks the Practice of attempting to expedite the Navigation by Flashes is effectual, or the best that can be adopted? he said, That so far from being the best, or anyways effectual, he thinks it is the very worst that could have been adopted; and its being handed down by our Forefathers from a Period of Time prior to the Invention of Pound Locks, is the true Reason why the Navigation is in so bad a State; by that method every Acquisition of Navigation performed on the River, is an Acquisition of difficulty: In Explanation of that Opinion, he begs to refer to his Second Report.

If the Canal was made from Abingdon to Hart's Ferry, and the Thames put into perfect Order from Hart's Ferry to Leachlade, Barges might navigate from Abingdon to Leachlade in one Day; but it would take two days at least to go by the Line of the River, if that was put into a perfect State.

That he made himself acquainted with the Method in which the Contracts were made by the Oxford Committee for building of Locks, because he found the Execution of the Works contracted for so very imperfect and improper, that he found it necessary to state the method by which the Business was done: He enquired

for Plans, Particulars, and Contract ; and, to his great Astonishment , he found that the Method of executing it was not stated on Paper ; even that the drawings prepared by Mr. Clowes were not executed in point of Quantity of Work done, especially in the Height of the side Walls, all which he has more particularly stated in his Report; and as to the Form of a Contract, or proposals for it given in by Workmen, there was no other Paper prepared, before or after the Agreement had been entered into, than the Paper he had delivered in: Part of the Wing Walls at the Tail of the Lock had tumbled down, and blown out for 10 feet in length; and 5 feet in Height on the North side, and the South side was defective for 6 feet in length, and 4 in Height, on Account of the improper Manner of laying the Foundation ; the Person who built the Lock attended him on the occasion , whose Name is Harris Goal Keeper at Oxford, and who, from Information, had never been employed in such Works before; that in One of his Surveys he found great Confusion in the Execution of the Improvements on the River, for at or near Biblick Hythe he found a Quantity of Trees cut down for the purpose of clearing the Bank for the Towing Path, which Trees had been left lying on the Bank in a most confused way, when, upon enquiry, he found that they were left in that Confusion by an Order of the Oxford Committee to the Person employed by the Commissioners, not to proceed, as they said it was within their District ; that he



saw them a considerable time after they had been cut down, and nothing had been then done, and he believes nothing more is now done, unless it may be the clearing away the Trees, all the necessary Bridges for the Towing path across Ditches, and the Mouths of side Streams, are still left undone, and by that Means the Towing path is interrupted and deficient.

And being asked, If he was sufficiently acquainted with the River from Boulter's lock to Staines, so as to be able to judge whether that can be made a good Navigation? he said, He has not been employed professionally: but as a subject of public investigation, he has examined the greatest part of that District of the Thames, and is of Opinion that the Navigation of it might be considerably improved, but not so as to make it a perfect Navigation, and not so good as a Canal Navigation, either in One or Two lengths equal to that Extent, one from Staines to Isleworth, and another from Staines upwards to Boulter's Lock; that he thinks the Navigation from Staines to Isleworth might be considerably improved by various Works, in Addition to the very great Improvements which have been done by the City of London since he was first acquainted with it; that there is a Loop near Chertsey, a short Cut and Pound Lock made in it opposite to Chertsey Bridge; another at Stonar's Cut, opposite to the River Wye, and by other Works of ballasting the Shoals and Contracting the Breadth of the Navigable Stream, would considerably

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improve it; that he can't think that these Works will make a safe and certain Navigation at all Times of the Year, as in the Cases of short Water Time, in particular dry Seasons, and in Times of Floods and Inundations, there must be great Uncertainty in the Navigation; that he apprehends there is no occasion to make any other Locks than the two he has mentioned, for to make more would require Weirs annexed to them; that it would be very easy to make a Canal from Staines to Isleworth, which would be advantageous to the Public in general; that he don't see that it would affect the Navigation of the River at all, the Quantity of Water necessary is so small as to be scarcely perceptible, and there are several Streams in the Country which might possibly supply the whole Canal; that if the Canal was made from Boulter's Lock it would be affected a Degree more, but then the Quantity will be so small it is not worth while to count in the Scale of the Question, it would not affect the worst part of the Thames Navigation in any sensible degree, and that only in the driest Seasons; the whole Water that passes by a Canal is the Lockage Water necessary to carry a Boat down the Canal, and a Boat will require a hundred thousand Times that Quantity to go down by the natural Stream.

And being asked, If he imagined the King's Engine at Windsor could any way be injured by making the Canal? he said, Not in the smallest Degree; and he is certain, that

the Engine might be improved so as to do double the business it does at present; and he conceives the Town of Windsor would receive no Injury at all, because the River Thames from thence to Illeworth would be as free for Navigation as it is now; and if the Canal was made, and a Cut of Communication from the Wharfs at Windsor into it, they would have the Opportunity of going by the Canal, or by the River which ever way they pleased, and at all Times of dry Seasons or of Floods, when the River would not be so safe or convenient, he conceives the Canal to be rather a Benefit than an Injury; that he considers that the Navigation of the natural Stream is always to be taken Care of in keeping those Works in Repair which are already made, and in scouring away any Shoals of Sand or Gravel cast up by Floods; but as to Weeds and Rushes, he considers them useful to the Navigation, inasmuch as they hang up the water over Shoals to a greater Depth than otherwise there would be; that the Navigation required by the Towns and Villages, and Persons interested in the Lands, would always keep the Navigation of the River in the natural State; but putting the Case of no barges passing up and down, of course the Shoals, and other Obstructions, would increase.

There is one Point of View, the most most material of any, in which the ruinous Method of navigating by Flashes has not been pointed out, and that is, that the whole of the

River Thames, from Oxford upwards, is used as a Reservoir to send Flashes forward for the Use of the Navigation of the lower Parts below Oxford; and further, it is the Practice of the River not to allow of any Flashes out of the Mill Dams in the lower Districts, unless a flash has been brought down from the Upper District, and it is equally prejudicial to all the Property in the Mills: To make the Navigation of the Thames in the most perfect State possible, it is absolutely necessary to purchase or agree for all Weirs and Fisheries, and to have an absolute Power over the Millers that they shall not work their Mills below a certain Level: The Obstruction in passing through Folly Bridge, Oxford, is the greatest throughout the whole Extent of the River; the Bargemen navigating the River all agree in this Point. Then,

Mr. THOMAS COURT, of Oxford, Bargemaster, navigating the whole Extent of the River from Leachlade to London, being examined, said, That Part of the Navigation of the River from Leachlade is in very bad Order, insomuch so, that, supposing Seventy Ten of Goods to be brought from Leachlade, they must have two Boats to bring them down to Brechens's Weir; another boat is then wanting to lighten the others and bring the Goods to Oxford, where one is sufficient to bring them to London; that Barges are from two days to two days and an Half, this Time



of the Year, perfecting the Voyage from Leach-lade to Oxford, at Flish Times three Days, and are three days going back with an empty Boat. That the Impediments are Shallows, the first of which from Brechin's Weir is Bold Weir, from the badness of the Repairs of which the Water cannot be kept up; the next is Godstow Pound, the Sill of the Lock is laid too high, and the Cut to the Lock is not of sufficient Depth, so that it is worse now than it was before, and more expensive; the Sill of Pinkill new Lock is also laid too high, and so was Osney; the Towing path on Port Meadow is so bad we cannot use it, being obliged to tow on the Farmers Grounds; on the other Side it it washed away in some Places so much, that a small Boat will go over it; it ought to have been made on the other side, on the firm Ground, that it would have been to the Interest of the Farmers, and to the Navigation, and it ought to be continued on that Side to Bablick Hythe; but he thinks it would be more adviseable to abandon the present Navigation down Port Meadow, and go by Witham and Botly, so as to fall in below the Folly Bridge in Oxford, as the Expence which has been laid out in Port Meadow and Godstow would have made the Cut: Pinkill Lock was built by one Nock, Mr. Daniel Harris acting as Engineer, who was a Journeyman Carpenter when he came to Oxford: The Locks at Saint John's Bridge, Buscot, and Rushey, are in good Condition, and have been so since they were built, and wanted no Alteration, and

answer the Purpose of the Trade ; they were built by Mr. Josiah Clowes ; the Navigation from the Mouth of the Thames and Severn Canal to Rushey is very well at present : There is a back Weir below Clarke's, constructed by Mr. Harris, which is blown up ; and should Low Water come, Boats will not be able to get over Clarke's Hill, without that being repaired directly : We can get up with a loaded Barge from Oxford to Leachlade , in half a Day more than when empty ; the great Difficulty occurs in the ferrying over so often—the Horses standing still more Hours in a Day than working ; At present the Navigation from Oxford to Wallingford is very well, but at Low Water it is bad from Sutton to Chamberhole ; that that Difficulty would in a great Measure be cured, by putting down a Stop or new Lock between Day's Lock and Sutton Lock, and contracting or deepening the Channel at Clifton Ferry ; that they have been sometimes longer going from Wallingford to Oxford, than boats have been going from Wallingford to London and back ; That the Towing path is very good from Wallingford to Newnham lock, but they are obliged to make several Crosses, by Reason of not being permitted to Tow across Lord Harcourt's Meadow ; from Newnham Lock to Oxford it is in a very bad State, wanting Repair very much ; Wallingford bridge is a bad one ; Sutton Lock has been improved, but the Barge Masters are liable to many Impositions there : They are obliged to drink at the Public House there ; The High Water

Marks are not correct—Newnham Lock is bad; every old Lock and Weir wants to be taken into the Commissioners Hands, because the Fishermen, who rent the Weirs in the West Country, will not shut in, according to the Order of the Commissioners, to keep in a sufficient Head of water, and the Millers draw the water off.

The River, between Windsor and Reading, is in a very good State, only a few Shallows want balasting; and Goring Lock is between two Mills, which, when at work, draw off the water, sometimes so much as to hinder the entrance into the lock; and there are very bad Shallows below Wallingford bridge and between Goring and Cockfolds.

The Navigation is very well from Reading to Boulter's lock, except below Marlow Pound Lock; between Boulter's lock and Staines is very bad in low water Time; from Staines to Isleworth is equally bad.

And being asked, how many Horses are customarily used in towing a Barge of Seventy Tons against the Stream, from Staines to Boulter's lock? he said, from Stadbury to Windsor, 10 or 12 horses; from Windsor to Amerden bank, 8; from thence to Boulter's lock, 10 and 12; from Boulter's to Poulton's horfing, 6; from thence to Hedfor, 8; from thence to Spade Oak 8; to Marlow 8; to Henley 5 or 6; from thence to the Kennet's Mouth, 8;



from thence to Gaddington, 10; from thence to Chamberhole, 6; from thence to Benson, 7 or 8; and from Benson to above Abingdon, 10 or 11 sometimes 12; from thence we take our own Horses, 5; from Oxford to Leachlade they use 3 boats to carry up 70 Tons, with 3 Horses to each boat; upon the Thames and Severn Canal they carry the 70 tons in 1 Boat, and with 1 Horse; the Freight and Tonage from Leachlade to London is 20s. per ton; from London to Leachlade, 25s.: that if a Canal was cut from Boulter's lock to Isleworth, according to Mr. Trufs's Plan, and the Improvements made from Oxford to Leachlade, they could carry Goods for 15s. up, and 15s. down: That he has considered this, and is certain, from the Calculations he has made.

That there is a very great expence in towing lines between Boulter's and Isleworth; a Horse line costs about £10. or £11., which, if it lasts 3 Voyages, is looked upon as a great deal: that he never knew one last four but once which was in Summer Time: that the Trade is so much increased, that they can't get the goods downward to London for want of a returned Freight: the Chief of the Goods brought downward are at present Iron, Copper, Tin, manufactured and Pig Iron, Brasses, Spelter, Cannon, Cheese, Nails, all Iron Goods, and bomb Shells.

We have not brought any Coals down from the Severn Canal these Two Years; the

Expenſe run ſo high we could not do it on the River ; the Freight from Leachlade to Oxford is 8s. 6d. per ton; if the River was improved, and no Impoſition made at the Weirs we could do it for 4s. 6d.; the Freight for Copper to Temple Mills is 18s. the ſame to Wrayſbury near Staines; if the Improvements were made above Oxford we could carry it 4s. 6d. cheaper, and ſhould be able to bring Coal brought from the Thames and Severn Canal to Oxford, ſo as to be able to underſell the Coal brought to Oxford by the Banbury Canal: That Impoſitions are exacted at private Locks; that the barges can't go ſo deep up as down, being ſafe with two inches of board down, but muſt have Six up; that, if the Weather was calm, and long Days, and the water as it was laſt Year, the barges could go from Wallingford to Boulter's lock one Day, from Boulter's to Brentford a Day and a Half, it has been done in a Day; from Brentford to Boulter's lock, they are two days and a half going up; from thence to Wallingford about the ſame Time; he was never longer laſt Summer than nine days going from London to Oxford; when going down, they generally have a ſingle Horſe to draw them out of the Heads of the different Pounds, and along the Reaches that lead to the Pound locks.

With favourable water it will take 1 day to go from Oxford to Wallingford, and  $2\frac{1}{2}$  from Wallingford to Oxford; but they have been 3 weeks, and from London to Oxford 8 weeks.

And being asked what he usually carried up? he said Groceries, Deals, foreign Timber, Merchandize of every Kind, and a few Coals, and of late Raw Hides for Tewkesbury and Worcester, and Gunpowder to Bristol and Liverpool: that he has been applied to the last time he was up, to take Sugars to be carried to Bristol, but did not take them, for when they came to enquire the Price, they found they could go cheaper by the Kennet to Newbury, and the rest of the way by land Carriage: if the River was improved above Oxford, he thinks that the Trade which goes by land Carriage from Newbury to Bristol would pass by Leachlade, and he is sure they could carry Goods from Leachlade to London at Sixteen Shillings and Six Pence per Ton.

Mr. WILLIAM LANGLEY, of Great Marlow, bargemaster, being examined, said, that he navigates the River from Henley to London a barge of 146 Tons, a small one of 77, and another of 66; that it generally takes two Horses to draw the one of 146 tons from Putney to Richmond, with the small barge in Tow three horses; from Richmond to Hampton Court mostly Ten horses with the single boats, Twelve with the small One in Tow; from Hampton Court to Weybridge Twelve, and Fourteen with the small one in Tow; from Weybridge to Windsor Fourteen, and Seventeen with the small barge in Tow in the Winter Streams; from Windsor to Amerden bank



Ten horses, with the large one twelve; from thence to Boulter's lock Twelve horses, either single or double; from Boulter's lock to Hedfor Twelve; from Hedfor to Cookham, Ten horses; from Cookham to Spade Oak, Four horses, being a very easy Strain; from Spade Oak to Marlow Ten horses; and from Marlow to Henley Eight; that the worst Passage is Tangier Flat, a Quarter of a Mile below Windsor, a very dangerous Place, and at Sunbury Flat Accidents sometimes happen to the horses by the Paths being so bad: above Tangier £14. a year used to be paid to Mr. Robert Cannons who kept Windsor Bridge, but they now pay 3s. 6d. per Voyage; he has had another bill of 25s. brought him for a Towing Path Rate down at Old Windsor Gate.

That he lately came from Henley to Brentford in two days: the shortest time of going up is Three days to Marlow, sometimes a whole Week when the water has been low; but the general Rate is Four days from London to Marlow this Time of the year, and Five in short days, which he supposes is 70 or 80 miles by water. Then,

Mr. RALPH ALAN MOULD, of Newgate Street, Cheesemonger, being examined, said, that he has been concerned in that Trade upwards of 26 Years; and that he receives great quantities of Cheese from Lechlade by barges, for which he pays 13d. per

hundred Freight, which is higher than what was paid 5 years ago, occasioned By the Expences on the River by additional Locks, advance of Wages, and dearness of Provisions : that he supposes 2,500 tons of Cheese are Annually sent in Time of Peace from Leachlade to London, but in Time of War the Tonnage increases from eight hundred to a thousand; that he receives Cheese from Abingdon, from whence he conceives from 12 to 1500 tons of Cheese are brought, the Freight for which is 10d. per 100 weight ; a great Quantity of which Cheese is brought through Leachlade from Gloucestershire, to be put on board at Abingdon, which Cheese if the Navigation of the River was so improved that a barge might pass in one day from Leachlade to Abingdon, would be put on board at Leachlade ; that if the River Navigation was certain, and not liable to Obstructions, the Ships that load at Waterford would frequently unload at Bristol on Account of the Merchants at London, and be from thence conveyed by the way of Leachlade and the Thames to London ; and he receives Cheese from Cheshire and Shropshire by the same Way ; that Cheese is liable to be much damaged by Delays on the River that they usually send it from the beginning of August to May, and the other Months receive it by land Carriage, the Expence of which from Cirencester to London is 3s. per hundred weight, and from Tetbury 3s. 6d. ; from Tetbury to Leachlade 9d. per hundred weight ; from Cirencester to Leachlade 6d. ; that if the River Navigation

was certain, they should begin bringing their Cheese earlier in the year, and should have Welch Butter by the same Conveyance; if there was no Obstacle in the Navigation, he should get the Cheele in 5 days, by land Carriage it is 3 days; that it is now sometimes 6, 7, 9, and 10 days detained on the River.

WILLIAM VANDERSTEGEN, Esquire, one of the acting Commissioners, being examined, said, that he has acted as a Commissioner many years; that the Commissioners have given Orders for ballasting, from Time to Time, the shallow parts of the River in the second District; they have likewise erected some little Stops to raise the Water in the shallowest Parts; they have likewise made a Towing path, and erected Bridges and Gates for towing by Horses throughout the whole District. These Works have been so insufficient for the Purpose of navigating Barges loaded according to Act of Parliament, that the Commissioners have several Times reduced the Tolls to the Rate of a Boat laden at three feet only, instead of three feet nine, owing to the want of Pens to keep a sufficient Depth of Water in dry Seasons; that he does not recollect that any Opinion has been given by Professional Men how these Defects may be remedied, except that of Mr. Clark, who has been Surveyor of this District 19 years, assisted by Mr. Treacher, whose Opinion was, that the erecting three Pound locks would make a Navigation that



hundred Freight, which is higher than what was paid 5 years ago, occasioned By the Expences on the River by additional Locks, advance of Wages, and dearness of Provisions : that he supposes 2,500 tons of Cheefe are Annually sent in Time of Peace from Leachlade to London, but in Time of War the Tonnage increases from eight hundred to a thousand; that he receives Cheefe from Abingdon, from whence he conceives from 12 to 1500 tons of Cheefe are brought, the Freight for which is 10d. per 100 weight ; a great Quantity of which Cheefe is brought through Leachlade from Gloucestershire, to be put on board at Abingdon, which Cheefe if the Navigation of the River was so improved that a barge might pass in one day from Leachlade to Abingdon, would be put on board at Leachlade ; that if the River Navigation was certain, and not liable to Obstructions, the Ships that load at Waterford would frequently unload at Bristol on Account of the Merchants at London, and be from thence conveyed by the way of Leachlade and the Thames to London ; and he receives Cheefe from Cheshire and Shropshire by the same Way ; that Cheefe is liable to be much damaged by Delays on the River that they usually send it from the beginning of August to May, and the other Months receive it by land Carriage, the Expence of which from Cirencester to London is 3s. per hundred weight, and from Tetbury 3s. 6d. ; from Tetbury to Leachlade 9d. per hundred weight ; from Cirencester to Leachlade 6d. ; that if the River Navigation

was certain, they should begin bringing their Cheefe earlier in the year, and should have Welch Butter by the same Conveyance; if there was no Obstacle in the Navigation, he should get the Cheefe in 5 days, by land Carriage it is 3 days; that it is now sometimes 6, 7, 9, and 10. days detained on the River.

WILLIAM VANDERSTEGEN, Esquire, one of the acting Commissioners, being examined, said, that he has acted as a Commissioner many years; that the Commissioners have given Orders for ballasting, from Time to Time, the shallow parts of the River in the second District; they have likewise erected some little Stops to raise the Water in the shallowest Parts; they have likewise made a Towing path, and erected Bridges and Gates for towing by Horses throughout the whole District. These Works have been so insufficient for the Purpose of navigating Barges loaded according to Act of Parliament, that the Commissioners have several Times reduced the Tolls to the Rate of a Boat laden at three feet only, instead of three feet nine, owing to the want of Pens to keep a sufficient Depth of Water in dry Seasons; that he does not recollect that any Opinion has been given by Professional Men how these Defects may be remedied, except that of Mr. Clark, who has been Surveyor of this District 19 years, assisted by Mr. Treacher, whose Opinion was, that the erecting three Pound locks would make a Navigation that

would keep a sufficient Head of Water to navigate three feet ten inches ; that he is himself confident it will do so, but there being a Restriction in Act 28 Geo. III. not to erect any Pound lock below Boulter's lock, the Commissioners could not give Orders for that purpose, but they intended to have applied to Parliament this Session for Power to enable them to erect Pound locks in this District, but the Occupiers of Land in the Neighbourhood of Windsor being fearful that penning the Water might create Injury to their lands, it was determined, at a Meeting held the 12<sup>th</sup> of January 1793, that the Application should be deferred, and at that Meeting appointed Mr. Benjamin Davis as Engineer, and Mr. Jessop the Engineer was added on the 2<sup>d</sup>. of February, but that no Survey has been made, or any Opinion laid before the Commissioners ; that he does not imagine the River had been too deep to have made a Survey before the 1<sup>st</sup> of March, but Mr. Davis then reported it was too high for him to take such a Survey, so as to enable him to make a Report ; that he is well assured no other Devices but Pound locks will effectually make it a good Navigation.

In the Third District the Commissioners have erected Pound Locks by the Side of the old Locks, by which means, and making Horse Towing Paths, and attending to the Removal of the Shallows, the Navigation has been rendered good.



In the Fourth District Pound Locks have been erected, Towing paths made, and Shoals ballasted, so that the Rivers afford a good Navigation, except when the Boats lie aground, and the Water is drained for the purpose of getting them off.

Pound locks have been erected in the Fifth District, Towing Paths made as far as Newnham, and Orders given for immediately completing the Towing Path to Oxford; and the River has also been ballasted, so that the Navigation, though not complete, is far from being bad.

In the Sixth District, Six Pound Locks have been erected, but they have not had the good Effect as in other Parts of the River, on Account of the Proprietors of Weirs in that District not having attended to the Orders of the Commissioners to repair them sufficiently, on Account of which they cannot pen a sufficient Head of Water; Horse Towing Paths have been made in the upper part of the District, and, he believes, a good deal of Ballasting done; but, in the lower part, little is done to the Towing paths, much ballasting required, and an Extent of two Miles of the River, between Osney Pound and Godtow Pound, remains unimproved, and requires great Amendment.

That a Survey was made, about 2 years ago, by a Committee of Commissioners, atten-

ded by Mr. Mylne, from Leachlade to Whitchurch, which they reported to the General meeting of Commissioners, who approved of their Report, and referred it to the Executive Committee at Oxford, with a Recommendation to put what was recommended in the Sixth District into practice; but in the Summer of 1792 the Commissioners, finding little of the Work above recommended had been done, directed him to make a Survey, which he reported to the Commissioners on the 6th of August; that most of the Things so directed to be done were still wanting; In consequence of which Report, the Commissioners gave directions to the Oxford Committee to complete the Works: that since that Time the River has been so full of Water in that Part, that little or none of the Works could be executed; but they are now preparing to proceed with all expedition.

That the Powers of the Act are executed by Commissioners at General or District Meetings, the General Quarterly Meetings being held at Reading, Marlow, and Oxford; the other General Meetings are usually adjourned to the Neighbouring Towns, to where the Works are carrying on; That he has no doubt, but that if the Works so recommended were completely executed, but that the River will carry Barges drawing Three feet Ten Inches, as far as Boulter's Lock, and below it, if the Commissioners were authorised to erect Pound Locks in that District.

That it has been the Opinion of some of the Oxford Committee it was not necessary to go on with those Improvements until the Thames and Severn Canal was finished ; but the Commissioners were of a different Opinion, and desirous of their completing it as soon as possible.

The Extent of the Navigation within the Commissioners Jurisdiction being upwards of an 100 miles, it is difficult to get the Commissioners to go to Meetings far from Home, consequently few of the Commissioners are acquainted with the whole Line of the Navigation, and therefore it is difficult for them to judge with Propriety of all the Works necessary; and there is no doubt but that if the Commissioners were to appoint a select Number of Commissioners to undertake the Improvement of the River, great Convenience would arise from it, as well as benefit to the Public. Then,

CHRISTOPHER CHAMBERS, Esquire, of Mincing Lane, a Proprietor of the Thames and Severn Canal, being examined, said, that the present State of the Navigation of the River Thames is injurious to the Thames and Severn Canal; that Applications have been made to the Commissioners to improve it, and he recollects the Improving the River being objected to, until such Time as the Trade was brought thereon from the Canal, sufficient to satisfy the Expence; that if the Thames was



put into as perfect a State as possible, he thinks he should receive a fair Dividend for his Money, but now receives none; that the Canal was made in full Confidence that the Commissioners of the Thames Navigation would complete their Navigation by the Time it was opened, but the Proprietors have been disappointed.

That the making a Canal from Hart's Ferry to Abingdon would be of great Importance to the Thames and Severn Canal. Then,

Mr. JAMES BLACK, a Proprietor of the Thames and Severn Canal, being examined, said that he finds Inconvenience arise to the Canal from the present state of the Thames, having received several Letters complaining that a considerable Quantity of Goods, to the Amount of 300 tons, were detained at Leachlade, on Account of the Difficulties experienced by the Barge Owners in navigating the upper Districts of the River, and which is urged by the Traders on the Severn as an Objection to the sending Goods through the Thames and Severn Canal to London.

That the Cost of the Thames and Severn Canal was stated at the last General Meeting at above £250,000. including 5 per cent. Interest on the Advances, and that no Dividend has been made to the Proprietors: at Leachlade, since the Canal was executed, Coal has

been sold at 23s. a ton, which before the Canal was from 30s. to 36s.; and that if the Navigation of the River was improved, the Proprietors of the Canal would receive a fair Dividend for their Money; that repeated Applications have been made to the Commissioners to improve the Thames, but he has been told by them they would not complete the Navigation, until there was a Trade upon the River from the Canal.

Mr. Black then produced a Copy of a Notice sent by the Clerk of the Thames and Severn Canal Company to the Commissioners of the Thames, desiring them to improve the Navigation of the River; then,

Mr. Black being further examined, said, that he has had within a month or six Weeks a Proposal by Mr. Crashey, of Thames Street, who has a considerable Manufactory of Iron above Cardiff; he applied to him to know whether he would engage to take 150 tons per week in the whole amounting to 2,000 tons, which he had laying in Glamorganshire; that the Thames and Severn Canal company have built a Schooner-built Vessel on Purpose to accommodate the Welch trade, with a sliding Keel, in order to navigate the Bristol Channel, as well as the Canal; that he thinks the Price of Insurance from the Bristol Channel to London can't be done for less than from 5 to 7 per cent at the present time, and in time of Peace is about One and a Quarter.

That the chief Trade from the Thames and Severn Canal to London is Tin, Iron from Colebrook Dale, Cyder, Copper, Lead, Salt, Cheefe, Brass, and a great Variety of other Merchandize, and Aquafortis from Bewdley; and that the Trade back consists of all Kinds of Groceries, Rags, Ox Hides, considerable Quantities of Tallow, Dye Woods for the Cloathing Manufacturers in Gloucester, Pot Ashes, and Oil for the Clothiers.

A MEMBER present delivered in Extract from Proceedings of a Meeting of the Commissioners at Leachlade the 29th of December 1791;

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Upon a Review of the whole Evidence it appears to your Committee, that notwithstanding the Expenditure of the Sums mentioned in the Accounts delivered in by Mr. Montague, much to the Honour and Credit of the City of London, and of those stated by Mr. Allnutt on the Part of the Commissioners of the Five Upper Districts, the River is yet in many parts in a very imperfect State. The chief Impediments to its Navigation are in the upper part of the First, and in the Whole of the second and sixth Districts.

It also appears that no regular Plan of the whole Course of the River has been taken



by any competent Engineer, on the Part of the Commissioners, and that no Scheme or Project for a systematic Improvement has ever been laid down and uniformly acted upon; that various Opinions prevail amongst the Commissioners, with respect to the best manner of improving the River in the Second and sixth Districts: and that nothing effectual had been done in consequence of that Contrariety of Opinion: To overcome the Difficulties in these Districts Two modes have been suggested, One of constructing Pound Locks where none have hitherto been erected; the other by making Two Canals, the First from Boulter's Lock to Isleworth, by which 18 miles of Navigation will be saved; the Second, from Hart's Ferry, near New Bridge, to Abingdon, by which near 19 miles will be saved.

Your Committee will not presume to give any Opinion of their own as to either Proposition, but only state the Facts communicated to them in consequence of the Enquiry they have been directed to make; by a reference to the Journals of the House, it will appear that the Commissioners of the Five upper Districts have opposed every Attempt at Improvement by Canals, though the Evidence given to your Committee affords abundant testimony of their Negligence in endeavouring to perfect the River.

In the Second District the Commissioners have no Power to erect Pound Locks, but they

have made Towing paths, and do not collect any Tolls to pay the Interest of the Money borrowed for such Purpose.

It cannot be doubted but Powers to erect Pound Locks in that District might have been obtained by the Commissioners, had not their own disagreement prevented them from making proper Application to Parliament.

In the Sixth District they already possess Powers sufficient for its Improvement, equal to the Navigation of the other Districts, but such Powers have not been exercised by them in any Degree adequate to public Expectation or general Advantage.

There has been sufficient Time since 1785 (when a Canal was proposed to avoid the difficulties of that District) to compleat the Navigation thereof. Your Committee cannot help expressing their Surprise at the little Progress made therein, especially as they find that additional Powers were given by the Act 28 Geo. III. and that Loans have been offered, to a considerable Amount, more than the Commissioners required; also, that frequent but ineffectual Applications have been made to the Commissioners to perfect the River by the Proprietors of the Thames and Severn Canal.

Persons of Experience ought to be employed in the Execution of the Works, the

Plans and Directions whereof should proceed from some Engineer of established Ability in such Undertakings, who has no local Interests or prejudices to bias his Judgment.

It is, at this time, a Matter of much doubt and Argument whether Pound Locks will answer the Purposes intended by those who are advocates for them, in the first and second districts, without occasioning much Inconvenience to the Land Owners. The Improvements to be made in these District depend upon a consistent Plan being adopted that may answer the purpose of both, otherwise the Public will not receive the full Benefit of an improved Navigation, as an Imperfection in either of these Districts affects the Navigation of the Whole.

Upon the proper Measures to be pursued a Controversy has subsisted upwards of Twenty Years, during which Time the Public Interest has sustained much Detriment.

It appears to Your Committee that, if the Canals were executed, Thirty-seven Miles of Navigation would be saved in the Whole; the Expence of a Voyage from the Severn to London considerably reduced, which might then be performed with certainty Three or Four Days sooner than can be done by the natural Course of the River.



According to the Evidence of Mr. Mould, a great Advantage would be given thereby to the conveyance of provisions at all Times from the Western Counties to London, and from Ireland, in Time of War.

The Transport also of cannon, Shells, &c. from the Foundries in Shropshire and Wales, would be much facilitated.

Some Regulations are necessary with regard to Tolls, whereby all parts of the River may be placed on equal Terms, and the general Trade encouraged.

By the 11th of George the Third the Commissioners were ordered to inquire into the Tolls formerly paid to the Lock Owners and others: Your Committee conceive a Clause was omitted in powering the Commissioners to make some Regulations in a point in which the public seem to be very essentially injured. Though Parliament unquestionably meant to preserve the Income of the Lock Owners in as good a State for the future as they then enjoyed, yet it never could have been intended, your Committee presume, to increase their profits at the Expence of the Public; such however has been the Effect, by admitting them to receive an Increase of Income from every addition to trade on the River, acquired not by their own Expenditure but by Disbursements from the Public Purse.

Expedition and Certainty of Carriage are absolutely necessary for the promotion of Trade to Advantage: every Impediment to the free and uninterrupted Navigation of the Thames should be removed without Delay, as an Evil injurious to the general Trade and Commerce of this Kingdom.

The River Thames, ever of itself an important Object, has of late arisen to a greater Degree of Consequence, by its Communication with the interior parts of the Island from the Junction of various Canals.

It appears to your Committee that the grand cause of Delay in its Navigation cannot be removed until all the old Locks, Weirs, &c. are purchased, or placed under the absolute Controul of the Commissioners, and the Practice of Flashing is abandoned; that Mode is truly stated the Infancy the Infancy of Artificial Navigation; insuperable Objections to its Continuance appear.

It appears to your Committee that sufficient Powers have not been given to the Commissioners to make the Navigation so perfect as it is capable of being made, and the Public Interests require; but that it never can be managed to the greatest Advantage under the numerous Body of Commissioners so constituted as the present.

Whether it may be more prudent to

form a Corporate Body, according to a Petition presented to this House in the Year 1784, or to appoint a Select or Permanent Committee to whom the Whole Executive Power should be committed, subject nevertheless to the Controul of the Commissioners at large, in all Cases where public or private Rights are concerned, must be left to Parliament to determine, which alone possesses sufficient Power to reconcile contending Interests, to reform Abuses in the Navigation, and to overcome Prejudices that impede its Progress to Perfection.

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